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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,406	12/16/2005	Michael B. Biscoglio	63162A	1081
35503 7590 09/02/2008 Union Carbide Chemicals and Plastics Technology Corporation P.O. Box 1967 Midland, MI 48641-1967			EXAMINER TESKIN, FRED M	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 09/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,406

Applicant(s)

BISCOGLIO ET AL.

Examiner

Fred M. Teskin

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

This Office action follows a reply filed on 8 May 2008, which presents amended versions of claims 1, 2, 6-8, 10 and 13-15. Claims 1-15 remain pending and under examination.

Claim objections as per numbered paragraphs 4, 5, 7 and 8 of the prior Office action have been obviated by the amendments made to the involved claims. Further, the prior art rejection of numbered paragraph 12 thereof is withdrawn in view of the amendments made to claims 1 and 13-15 and applicants' arguments directed to the Lorigan *et al* reference.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 7 stands objected to because of the following informalities: the amendatory term "dinonylnaphthalene" should be corrected to --dinonylnaphthalene--. See numbered paragraph 6 of the prior Office action. Appropriate correction is required.

If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 119(e), a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the

reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.

If the instant application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional

information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Claims 1-15 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 4, 11-17, 21 and 22 of copending Application No. 10/561,210. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to substantially the same composition comprising silane-functionalized olefinic polymer, acidic silanol condensation catalyst, and antioxidant not having a tertiary alkyl-substituted aryl or phenolic group.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-15 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending Application No. 11/817,245. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to substantially the same composition comprising silane-functionalized olefinic polymer, acidic silanol condensation catalyst, and antioxidant not having a tertiary alkyl-substituted aryl or phenolic group.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' arguments filed 8 May 2008 respecting the double-patenting rejections have been fully considered but they are not persuasive.

Applicants argue essentially three points: (1) in the case of the '210 application, patents issuing from the instant and cited applications will have the same term due to identical filing and priority dates and, as such, entry of a terminal disclaimer would not modify the terms of the granted patents; (2) in the case of the '245 application, its relevant dates are subsequent to the presently pending application's provisional application filing date and the PCT application filing date, so that a terminal disclaimer would have no bearing on the term of the present application; and (3) neither of the cited applications can serve as prior art against the presently pending application.

As to points (1) and (2), attention is directed to MPEP § 804.02(VI), which details the reasons for insisting upon a terminal disclaimer to overcome a non-statutory double

patenting rejection in a continuing application subject to a 20-year term under 35 U.S.C. 154(a)(2). These include the statutory provisions for patent term extension based upon prosecution delays during the application process and for deletion of a priority claim under 35 U.S.C. 120, 121 or 365(c). In light of these provisions, it cannot be ensured that patents issuing from the instant and '210 applications will necessarily have the same term, or that a patent issuing on the '245 application will necessarily lapse two years after the term of any patent granted from the present application. And in any event, the argument concerning co-terminus patents fails to address the second purpose of a terminal disclaimer, which is prevent potential harassment of an accused infringer by multiple parties with patents covering the same patentable invention.

Responsive to point (3): it is immaterial whether or not the cited applications would, if patented, qualify as prior art against the presently filed application. See MPEP § 804(II)(B)(1) (double patenting rejection of the obviousness-type is "analogous to [a failure to meet] the nonobvious requirement of 35 U.S.C. 103 except that the patent principally underlying the rejection is not considered prior art." [citation omitted]). The test is, rather, whether any claim of the subject application claims subject matter not patentably distinct from the subject matter claimed in a commonly owned application or patent. Examiner maintains that the claims of the instant application are not patentably distinct from the noted claims of the cited, copending applications for the reasons set forth above and in the prior Office action.

Claims 1-6, 8 and 10-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dammert *et al* (US 6005055) in view of Maringer *et al* (US 4343733).

Dammert *et al* teach a crosslinkable composition containing a crosslinkable polymer with hydrolyzable silane groups and at least one silanol condensation catalyst of formula ArSO_3H (claim 1). Inventive compositions are especially suitable for cable insulation (col. 2, ll. 12-24). The silane-containing polymer is obtained by copolymerization of an olefin with an unsaturated silane (col. 3, ll. 64-66; col. 4, ll. 30-58), although graft polymers may be utilized (col. 4, ll. 59-61). Dodecyl benzene sulfonic acid is the catalyst of choice (per examples). Incorporation of conventional additives is contemplated (col. 5, line 66), although Dammert *et al* are silent with respect to these materials.

Prior art of Maringer *et al* relates to use of additives for prevention of deterioration in polyolefin-based cable insulation compositions (col. 1, ll. 36-43 to col. 2, line 8). The patentees teach that cable insulation preferably contains oxalyl *bis*(benzylidenehydrazide) as a copper inhibitor (col. 4, ll. 26-32). One of ordinary skill in the art would recognize that for insulation in contact with copper, there is a need for incorporation of a copper inhibitor and, therefore, it would have been obvious to an ordinarily skilled practitioner at the time of applicants' invention to include oxalyl *bis*(benzylidenehydrazide) in the composition of Dammert *et al*, in the expectation of preventing deterioration of the insulation material from exposure to copper wire. The combination of reference teachings is proper since both references relate to cable insulation compositions.

Claims 1-5, 7, 8 and 10-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blank *et al* (US 6441097) in view of Maringer *et al* (US 4343733).

Blank *et al* disclose crosslinkable polymer compositions comprising an alkoxy silane functional polyolefin and a silanol crosslinking catalyst that is an alkylated naphthalene sulfonic acid substituted with 1-4 alkyl groups containing 5-20 carbon atoms (claim 1). The resulting crosslinked polymeric compositions are said to be desirable for use as coatings for electrical cables and wires (col. 1, ll. 40-43). Although the reference shows the preferred embodiment of using zinc dinonylnaphthalene sulfonate, it would have been obvious to one of ordinary skill in the art to use the corresponding free acid, dinonylnaphthalene sulfonic acid, as the condensation catalyst because Blank *et al* teach that alkylated naphthalene sulfonic acids are also useful catalysts (col. 4, ll. 20+). One having ordinary skill in the art would have found it obvious to use dinonylnaphthalene sulfonic acid especially in light of the fact that the zinc salt is exemplified therein.

Prior art of Maringer *et al* relates to use of additives for prevention of deterioration in polyolefin-based cable insulation compositions (col. 1, ll. 36-43 to col. 2, line 8). The patentees teach that cable insulation preferably contains oxaly**l** *bis*(benzylidenehydrazide) as a copper inhibitor (col. 4, ll. 26-32). One of ordinary skill in the art would recognize that for insulation in contact with copper, there is a need for incorporation of a copper inhibitor and, therefore, it would have been obvious to an ordinarily skilled practitioner at the time of applicants' invention to include oxaly**l** *bis*(benzylidenehydrazide) in the composition of Blank *et al*, in the expectation of

preventing deterioration of the insulation material from exposure to copper wire. The combination of reference teachings is proper since both references relate to cable insulation compositions.

Applicants' arguments with respect to Dammert *et al*, Blank *et al* and Maringer *et al* have been fully considered but are not persuasive of error in the repeated rejections.

Applicants initially argue that none of the cited reference identifies the problem, teaches how to solve the problem, or provides any motivation for a person skilled in the art to address the problem confronted by applicants herein. This argument fails because it is not necessary to establishment of the *prima facie* case that the prior art suggest the combination to achieve the same advantage or result discovered by applicants. See, e.g., *In re Kahn*, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) and *In re Dillon*, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (in banc). The *Dillon* rationale is directly analogous since in the instant case, as in *Dillon*, the difference between the claims and the prior art is the difference between compositions of matter. In view of the teachings of the prior art as delineated *supra* and absent probative evidence of criticality in the types of antioxidant used in the instantly claimed composition, the problem addressed by the inventors in making the claimed invention is not deemed to merit controlling weight.

Applicants further argue that Maringer only teaches the use of oxaly***bis***(benzylidenehydrazide) (OABH) as a secondary additive in combination with a synergistic mixture for protecting polymers against heat degradation, comprising N,N-disubstituted-p-arylene diamine, 1,2-dihydro-2,2,4-triaklyl quinoline and polymers

thereof, and magnesium oxide, hydroxide or carbonate; and no basis has been provided for choosing OABH in the absence of the other components of the Maringer teaching.

Implicit in this argument is applicants' apparent belief that the transitional language "consisting essentially of" added to claims 1 and 13-15 excludes all components of the Maringer stabilizer combination except OABH. This language, however, excludes only additional materials that *materially* affect the basic and novel properties of the invention as recited in the balance of the claim. See *In re Janakirama-Rao*, 137 USPQ 893, 895-896 (CCPA 1963). Here, since the other components of the Maringer combination meet the claim requirement for not having a tertiary alkyl-substituted aryl or phenolic group and since applicants' inventive composition may contain other additives (per Specification at page 5, lines 25+), a basis exists for finding they would not materially affect the novel properties of the invention - *i.e.*, that their presence would not cause the polymeric composition to generate a "high amount" of a foul-smelling gas and/or a combustible gas, consistent with the claimed properties. Where, as here, an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of the additional components of the prior art would materially change the characteristics of applicant's invention. See MPEP § 2111.03. No such showing has been made herein.

Claim 9 remains free of the prior art of record.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fred M Teskin/

Primary Examiner, Art Unit 1796